

# **ADITYA JAIN**



### **ACADEMIC DETAILS**

Year	Degree / Board	Institute	GPA / Marks(%)
	B.Tech in Computer Science & Engineering	Indian Institute of Technology, Delhi	8.617
2016	CBSE	Aklank Public School, Kota	93.00%
2014	CBSE	Hill Grove Col's Academy, Sumerpur	10

## **SCHOLASTIC ACHIEVEMENTS**

- Joint Entrance Examination (JEE) Advanced Rank: 96 (GE)
- Secured 54th position in ACM ICPC 2017 Asia Gwalior First Round with a team of three members
- KVPY: Secured All India Rank 126 and eligible for scholarship under Kishore Vaigyanik Protsahan Yojana by IISc
- NSEP(National Standard Examination in Physics): placed in the top 1% of the total 44,032 student participants
- NSEC(National Standard Examination in Chemistry): placed in the top 1% of the total 39,671 student participants

### **INTERNSHIPS**

- TU Delft, Netherlands Prof. Alberto Bacchelli (May, 2018 July, 2018): Code Review Tool for Github
  - Developed a chrome extension enabling better test code review practices through its altered viewing system
  - Integrated code navigation in Github using Language Server Protocol and Eclipse Java Language Server for JAVA
  - Designed it so that it can handle multiple branches of same repositories and therefore also in pull requests
  - Provided code coverage information using a third party API showing the line covered and the total percentage

#### **PROJECTS**

- Navigation System for ETV Simulation (Subodh Kumar) (January, 2018 May, 2018) :
- Worked on the navigation system of haptic device in the simulation of surgery of a brain disease called hydrocephalus
- Made the movement of the haptic more intuitive by registering real world points to the virtual space ones
- Calibrated the virtual space brain with a 3D one using three points
- Software Package for Engineering Drawing (Prof. Subhashis Banerjee) CourseProject(January, 2018 April, 2018) :
  - Developed a C++ package for conversions of given a orthographic image to isometric and vice versa
  - Designed the functional specification document for the software as well as UML diagrams for better understanding
  - Used Doxygen tool for the documentation and OpenGL and Qt for image rendering and GUI purpose
- Prolog Interpreter (Prof. Sanjiva Prasad) Course Project (April, 2018 May, 2018) :
  - Used OCaml-lex for token generation from the program code and OCaml-yacc for parsing the tokens
  - Backtracking and rule unification were used to implement the relational structure of the interpreter
- RAVI (M. Balakrishnan) (August, 2017 December, 2017) :
  - For reading of NCERT books for visually impaired Unicode Epub files were created from Non-Unicode Hindi files
  - Improved a pre-existing python program to convert non-unicode hindi Epub files to Unicode Epub files
  - Made a text parser in python to correct the errors in conversion of the files due to unexpected span tags
- Reversi Game (Prof. Anshul Kumar) Course Project (February, 2018) :
  - First developed a high level model of the game in JAVA which can be used to write instructions in assembly
  - Created the game in ARM assembly language by creating instructions and simulated on Embest Board plugin
  - Additional support for predicted moves and undo moves was integrated

## **COURSES DONE**

Intro. To Computer Science, Calculus, Linear Algebra & Diffe. Equa., Data Structures And Algorithms, Discrete Mathematical Structur, Digital Logic & System Design, Probability & Stochastic Pro., Mini Project, Minor Design Project - Vi, Computer Architecture, Programming Languages, Design Practices, Introduction To Economics, Pesr Projects

## **TECHNICAL SKILLS**

- Languages:C++, Java, Javascript, Python, HTML/CSS, OCaml, Prolog, TypeScript, Bash Version Control:Git
- Softwares: Xilinx ISE, Autodesk Inventor, Android Studio, Chai3D Hardware: VHDL

## **EXTRA CURRICULAR ACTIVITIES**

- Volunteer for AROHAN program: taught the basics of electromagnetism to students preparing for JEE
- Academic Mentor (Aug 2017 April 2018): Provided help to first year students facing problem in the course of APL100